

June 2005

Army Industrial Hygiene News and Regulatory Summary

This information is published by the Industrial Hygiene and Medical Safety Management (IHMSM) for the U.S. Army Center for Health Promotion and Preventive Medicine as a service to the Army Industrial Hygiene Program, Federal agencies, and industrial hygienist throughout the Federal and private sector

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DEPLOYMENT NEWS

Veterans of first Gulf War have more chronic fatigue, fibromyalgia

More than a decade after the first Gulf War in 1991, a detailed comparison of the health of veterans who were deployed to the Persian Gulf region and veterans who served elsewhere has found that the health of the two groups is very similar. However, the study also found that Gulf War veterans are more likely to have chronic fatigue syndrome and fibromyalgia syndrome. The proportion of Gulf War veterans with these two illnesses is very small, according to lead author Seth Eisen, M.D., physician at the St. Louis Veterans Affairs (VA) Medical Center and professor of medicine and psychiatry at Washington University School of Medicine in St. Louis.

The study, funded by the Department of Veterans Affairs, appears in the June 7 issue of *Annals of Internal Medicine*. It was conducted at 16 VA medical centers across the nation over a period of approximately 3 years. For the study, researchers performed a detailed series of medical and psychiatric assessments on approximately 1,100 veterans deployed to the Gulf War region and 1,100 veterans who were not deployed in that war.

Source: Occupational Health & Safety E-News 06-08-05.

KEY INDUSTRIAL HYGIENE TOPICS

Mold/Indoor Air Quality

Clearing the Air: A Model for Investigating Indoor Air Quality in Texas Schools.

This pilot project focused on the assessment of indoor air quality at a local high school in Galveston, Texas, using methods based on guidelines for the U.S. Environmental Protection Agency's Indoor Air Quality Tools for Schools program. The overall goal was to determine if use of Tools for Schools was sufficient to identify conditions

KEY INDUSTRIAL HYGIENE TOPICS (con't)

with the potential to cause adverse health effects. The primary objectives were to 1) establish an indoor air quality committee for the school to implement Tools for Schools assessments and management strategies, 2) collect air quality data in high-risk areas identified within the school by the indoor air quality committee, 3) collect outdoor air quality data at or in close proximity to the school, and 4) develop methods and instruments for assessing environmental risks associated with daily school attendance. Data were gathered on levels of formaldehyde and other volatile organic compounds (VOCs), ozone, particulate matter (PM10), mold, relative humidity, and temperature. Data values for each sampled pollutant were compared with federal standards, recommended values established by the American Conference of Governmental Industrial Hygienists for non-industrial populations, and effects screening levels developed by the Texas Commission on Environmental Quality. Levels of all VOCs except formaldehyde were found to be well within guidelines, as were ozone and particulate-matter levels. Mold, however, was widespread, including both common species and species associated with allergy and asthma, such as *Aspergillus* and *Alternaria*. In general, Tools for Schools provides an excellent foundation for a school indoor air quality program, although the authors did find it necessary to streamline data collection and did find that mold with the potential for adverse health effects was present, albeit not visible in some areas.

Source: Journal of Environmental Health

<http://search.epnet.com/login.aspx?direct=true&db=aph&an=17173418>

Date: June 2005, Vol. 67 Issue 10

Lead

Lead in the Construction Industry

Prompted by the White House to get rid of overly burdensome regulations, OSHA is asking stakeholders for advice on whether it should scrap or revamp its 1993 lead in construction standard. The standard requires “testing for lead exposures, provisions to protect workers from exposure where lead is present, and medical monitoring of exposed workers.” The agency unveiled its plans to revisit the lead in construction standard in the semi-annual regulatory agenda released on May 16. OSHA says it is reviewing the lead in construction standard under “Section 610 of the Regulatory Flexibility Act and Section 5 of Executive Order 12866 to determine if the standard is needed and if it should be amended.” Among other things, OSHA is concerned that the rule might overlap with other federal or state standards.

Source: DENIX “Inside OSHA”

<https://www.denix.osd.mil/denix/DOD/News/Pubs/OSHA/13Jun05/02.doc.html>

Note: DENIX account required (<https://www.denix.osd.mil>)

Date: 13 June 2005

Ergonomics

How to Take the Pain out of Laptop Use

Persistent back, neck, shoulder, and wrist aches are becoming increasingly common for millions of laptop users. Use of the small, lightweight computers is burgeoning as the wireless Internet has become commonplace. A special report in USA Today says although no nationwide studies have been conducted, doctors and physical therapists point to the fact that keyboards and screens on laptops are too close to one another for comfort. The fix, say the experts, is to use accessories aimed at making the laptop experience more similar to using a desktop computer. Those devices include wireless mice and keyboards and stands that prop up the laptop. Whether your workers risk injury from repetitive motion while using laptops, desktops, or machinery in the workplace, training can help prevent injuries and minimize lost work time. Interactive CD Course: Ergonomics is a self-paced course that helps workers understand repetitive motion, cumulative trauma, repetitive stress, and musculoskeletal injuries and how to avoid them.

KEY INDUSTRIAL HYGIENE TOPICS (con't)

Business and Legal Reports, May 2005

<http://www2.blr.com>

Best Practices: Ergonomic Standing Surfaces for Workers

How should you go about evaluating anti-fatigue matting and implementing a working surface that offers the best health and safety benefits, as well as the best value? Here are nine essential questions to consider before buying anti-fatigue matting that apply to any product, regardless of the manufacturer. These questions are based on a broad analysis of research data relating to the effectiveness of standing and working surfaces and their impact on reducing fatigue and injury and increasing productivity.

Question 1. Has the mat been optimized for softness and hardness?

Question 2. Does the mat provide an adequate balance between instability and stability?

Question 3. Does the mat resist bottoming out without being too soft?

Question 4. Does the mat adequately respond to worker movements?

Question 5. Does the mat balance shock attenuation and resilience (absorb and return energy)?

Question 6. Does the mat get softer as it is compressed?

Question 7. Does the mat resist movement under use?

Question 8. Is the mat easy to clean?

Question 9. Is the mat durable?

Source: Occupational Health & Safety E-News 06-15-05

Reducing the Risk of Manual Materials Handling

Manual materials handling (MMH) tasks such as carrying boxes or lifting crates lead to hundreds of thousands of injuries a year. Here are some key steps you can take to assess the risks in your workplace and develop practical solutions to reduce this costly occupational hazard.

Source: Occupational Hazards

<http://www.occupationalhazards.com/> (free email subscription)

Date: June 2005

Manual Materials Handling Implications of Global Changes in Work

The world of work is changing, driven partly by such forces as globalization, changed workforce demographics, increased work intensity and pervasive computing. These changes, in turn, have implications for manual materials handling systems and how they will affect the workforce in the future. Strategies for responding to the changes both within the ergonomics profession and in how ergonomics is used within a company are presented.

Source: Occupational Ergonomics: The Journal of the International Society for Occupational Ergonomics and Safety

<http://search.epnet.com/login.aspx?direct=true&db=aph&an=17292705>

Date: 2005, Vol. 5 Issue 1

Self-Evaluation of Biomechanical Task Demands, Work Environment and Perceived Risk of Injury by Nurses: A Field Study

A field study was conducted to determine how nurses regard their working environment in terms of perceived physical (biomechanical) tasks demands, work ability requirements, perceived effort, risk of injury/illness, and assessment of working conditions (physical environment). Twenty-one participants (7 registered nurses and 14 nurse assistants), currently working at a southern United States hospital in a mid-size metropolitan city, participated in this study. The study classified two hundred nursing activities into 18 task categories. A

KEY INDUSTRIAL HYGIENE TOPICS (con't)

comprehensive questionnaire for subjective evaluation of work environment was applied. A multiple stepwise regression modeling technique was then used to investigate plausible relationships between several dependent variables based on the questionnaire outcomes and the perceived nursing task demands (independent variables). The dependent variables included the following: 1) reported low back discomfort (RLBD), 2) perceived muscular effort (PME), 3) perceived risk of musculoskeletal injury/illness (PRMII), 4) dissatisfaction with the perceived comfort of working conditions (DWC), and 5) dissatisfaction with the perceived safety and health of working conditions (PSHWC). The results revealed that working with fixed lower back postures was the significant predictor for PME ($R^2 = 0.55$), PRMII ($R^2 = 0.475$), and PSHWC ($R^2 = 0.519$). In addition, the study found that walking and working with fixed lower back positions were significant predictors for DWC ($R^2 = 0.525$). Furthermore, the perceived demand for lifting, lowering, and carrying heavy objects during a working day was the significant predictor for RLBD ($R^2 = 0.611$).

Source: Occupational Ergonomics: The Journal of International Society for Occupational Ergonomics and Safety Occupational Ergonomics

<http://search.epnet.com/login.aspx?direct=true&db=aph&an=17292704>

Date: 2005, Vol. 5 Issue 1

Mechanical Considerations for Biomechanical Gleno-humeral Joint Modeling

The strength of the upper extremity in the frontal plane is two times less than in a sagittal plane. Shoulder strength is a limiting factor in upper extremity exertion capability. The purpose of this study was to analytically explain and present the influence of glenoid curvature and the middle deltoid muscle attachment on vertical translations of a humeral head in the superior-inferior direction during elevated arm positions. The paper reports the magnetic resonance results of the glenoid shape of 12 subjects and confirms variability in tangent inclinations and distances of the tangents from the lateral deltoid attachment. It was found that the largest translations of the humerus are during abduction ranging from 0° to 40° and from 140° to 170° . This suggests that both initiation of a movement and raising an arm above shoulder height are critical. The study confirms that the bone surface contacts as well as the muscles are important factors in stability and joint strength. It may provide new information on the sensitivity of the glenoid shape on glenohumeral joint stability and on individual arm strength

Source: Occupational Ergonomics: The Journal of International Society for Occupational Ergonomics and Safety Occupational Ergonomics

<http://search.epnet.com/login.aspx?direct=true&db=aph&an=17292706>

Date: 2005, Vol. 5 Issue 1

Differences in Muscular Activation and Fatigue for Intermittent and Constant Load

The aim of this study was to compare the influence of constant or intermittent load on muscle activation and fatigue. The analysis and assessment of muscular activation and fatigue was based on surface EMG measurements from eight muscles (seven muscles of the right upper limb and trapezius muscle). Two EMG signal parameters were analyzed for each of the experimental conditions distinguished by the value of the external force and the character of the load – constant or intermittent. The amplitude related to its maximum (AMP) and the slope of the regression line between time and median frequency (SMF) were the EMG parameters that were analyzed. The results showed that constant load caused higher muscular fatigue than intermittent load despite the lower value of the external force and lower muscle activation. Results suggest that additional external force might influence muscle activation and fatigue more than upper limb posture. The results of the study support the thesis that all biomechanical factors which influence upper limb load and fatigue (upper limb posture, external force and time sequences) should be considered when work stands and work processes are designed. They also indicate that constant load should be especially avoided.

KEY INDUSTRIAL HYGIENE TOPICS (con't)

Source: Occupational Ergonomics: The Journal of International Society for Occupational Ergonomics and Safety Occupational Ergonomics

<http://search.epnet.com/login.aspx?direct=true&db=aph&an=17292707>

Date: 2005, Vol. 5 Issue 1

Biomechanical Modeling for Understanding of Low back injuries: A Systematic Review

With the enormous burden that low back pain has on society, researchers are constantly attempting to find effective evaluation techniques that identify mechanisms of injury. One of the more widely used methods utilized to understand the physical loading on the lumbar spine is biomechanical modeling. While there are a wide variety of spine load models, they all operate under a load-tolerance premise. The current review discusses key considerations that current and future biomechanical models need to take into account such as injury site, torso posture, torso dynamics, individual differences, gender and age differences, and detailed anatomy. A detailed description of the potential injury sites reveals the importance of understanding the complexity of the spine and the necessity of looking beyond the inter-vertebral disc. This review provides a broad overview of current models, including a description of the prominent spine load models in the literature. Finally, future directions of spine biomechanical models are discussed, providing insight to potential new frontiers to increase our understanding of how low back injuries and pain is initiated.

Source: Occupational Ergonomics: The Journal of International Society for Occupational Ergonomics and Safety Occupational Ergonomics

<http://search.epnet.com/login.aspx?direct=true&db=aph&an=17292703>

Date: 2005, Vol. 5 Issue 1

Participate in Circadian's Annual Shiftwork Survey

While the advantages of operating beyond standard business hours are obvious, costs and liabilities are often involved with these extended hours. The burden usually falls on facility managers and shift supervisors to mitigate losses due to the absenteeism, injury and turnover that occur more frequently during extended hours. To help these managers measure results, each year, Circadian gathers data from extended hours managers in all industries that use shift work, and presents the results in its annual Shiftwork Practices report. The report provides the latest trends and key performance indicators, and breaks down information by region and industry to help show how the data vary.

Survey participants receive a free electronic copy of this year's report, along with last year's Shiftwork Practice Alerts. To complete the survey or learn more about this subject, visit www.circadian.com/practices

Source: Professional Safety, June 2005

<http://search.epnet.com/login.aspx?direct=true&db=aph&an=17195154>

Draft of ANSI A10.40, Ergonomics in Construction

Following is an outline of draft standard ANSI A10.40, Ergonomics in Construction. This draft is current as of Sept. 1, 2004; it has yet to be voted on. The draft standard applies to construction work in which risk factors are present that could lead to musculoskeletal injuries; it does not apply to office or administrative work performed by construction firms. The standard is designed to reduce occupational risk factors for musculoskeletal injuries in construction. The generally accepted categories of these factors are 1) force; 2) awkward posture; 3) repetition; and 4) vibration. The degree of risk is related to the magnitude of the risk factor, duration of exposure and number or combination of risk factors. Personal risk factors such as age, physical conditioning

KEY INDUSTRIAL HYGIENE TOPICS (con't)

and medical conditions may also be related to the development of musculoskeletal injuries. Topics include Identification of Hazardous Tasks, Identification of Potential Solutions, Implementation & Evaluation of Solutions, Training, Employee Participation, and Injury Management Program.

To learn more go to <http://www.ansi.org>

Spine Society Offers Resources for a Healthy Back

Back injuries make up one-fourth of all nonfatal workplace injuries and result in nearly one-half million lost workdays each year. Spine health is critical because the spine supports the entire skeleton and bears most of the burden of the body's weight, providing an anchor for a complex musculature. To help safety managers promote neck and back health, North American Spine Society (NASS) has published 10 handouts, including "Back Pain Risk Scale"; "Exercises for a Healthy Back"; "Ten Tips for a Healthy Back"; and "Seven Back Pain Warning Signs." NASS also offers "Know Your Spine," an easy-to-read, 24- page booklet that provides a quick guide to spine anatomy and includes preventive care tips. In addition, the NASS website, www.spine.org features "For Spine Patients," a section that highlights diet and lifestyle; exercises; and posture and proper lifting techniques.

Source: Professional Safety, June 2005

<http://search.epnet.com/login.aspx?direct=true&db=aph&an=17196988>

Illness/Injury

Breast Cancer Risk in Farm Workers

In a registry-based case control study of breast cancer in farm labor union members in California, 128 breast cancer (BC) cases newly diagnosed in 1988–2001 and 640 cancer-free controls were investigated. Stage and grade of disease at diagnosis were about the same as in the California Hispanic population. Risk of breast cancer was not associated with work with any specific crops or commodities except mushrooms, where the adjusted odds ratio (OR) was 6.00 (95% CI 2.01–18.0). Controlling for covariates, adjusted ORs (and 95% CIs) for breast cancer in quartiles of pesticide use were 1.00, 1.30 (0.73–2.30), 1.23 (0.67–2.27), and 1.41 (0.66–3.02). Chlordane, malathion, and 2,4-D were associated with increased risk. Risk associated with chemical use was stronger in younger women, those with early-onset breast cancer, and those diagnosed earlier (1988–1994).

Source: International Journal of Occupational and Environmental Health

http://www.ijoeht.com/pdfs/IJOEH_1102_Mills.pdf

Date: Volume 11, Number 2

April - June 2005

Mercury Levels in Urine and Hair of Children in an Andean Gold-Mining Settlement

The field study investigated mercury (Hg) levels in urine and hair of Andean children of indigenous Saraguro and Metiz gold miners in the Nambija, Ecuador gold mining settlements. Spot samples of urine and hair samples were collected concurrently from 80 children each. The study concluded that the wide range of Hg levels in the urine and hair of Andean children of gold miners may place them at risk for neurodevelopment and learning disorders.

Source: International Journal of Occupational and Environmental Health

http://www.ijoeht.com/pdfs/IJOEH_1102_Counter.pdf

Date: Volume 11, Number 2

April - June 2005

KEY INDUSTRIAL HYGIENE TOPICS (con't)

Adverse Impact of Insecticides on the Health of Palestinian Farm Workers in the Gaza Strip

The study assessed biomarkers in Palestinian farm workers in the Gaza Strip who used organophosphorus insecticides. Serum cholinesterase and complete blood count were determined before and after spraying organophosphorus insecticides. Burning sensations in eyes/face (62.5%), itching/skin irritation (37.5%) and chest symptoms (29.2%) were reported. Serum butyrylcholinesterase (SBUChE) was significantly decreased at the end of the work day. Burning sensations in eyes/face and skin rash were significantly associated with inhibition of SBUChE activity ($p < 0.05$). Younger workers were more affected. Leukocyte and platelet counts were increase and hemoglobin decreased significantly reflecting acute poisoning. Monitoring of SBUChE and hematologic parameters of farm workers could be useful to predict and prevent health hazards of pesticides.

Source: International Journal of Occupational and Environmental Health

http://www.ijoeht.com/pdfs/IJOEH_1102_Mourad.pdf

Date: Volume 11, Number 2

April - June 2005

Hospital-based Survey of Pesticide Poisoning in Japan, 1998-2002

Data concerning clinical cases of pesticide poisoning from 1998 to 2002 from the hospitals affiliated with the Japanese Association of Rural Medicine were analyzed. 346 cases of poisoning by agricultural chemicals were reported from 65 hospitals. Suicides accounted for 70% of pesticide poisoning cases, followed by accidental exposures during spraying work (16%) and accidental ingestion (8%). The majority of cases were acute or subacute systemic poisonings (90%), followed by acute dermatitis (5%) and chemical burns (3%). Organophosphate insecticide was the most frequent inducer of clinical cases (36%), followed by bipyridylum herbicide (20%) and carbamate insecticide (6%). The death rate from poisoning by the herbicide paraquat was more than 70% of clinical cases even though it is a low-concentration product, whereas those from the alternative herbicides, glufosinate and glyphosate, were less than 10%.

Source: International Journal of Occupational and Environmental Health

http://www.ijoeht.com/pdfs/IJOEH_1102_Nagami.pdf

Date: Volume 11, Number 2

April - June 2005

Personal Protective Equipment

Guide to Hand Protection

Take advantage of surveys and sampling programs available from most manufacturers and suppliers.

This article appears in the June 2005 issue of Occupational Health & Safety.

KEY INDUSTRIAL HYGIENE TOPICS (con't)

	Strengths	Weaknesses
1. Leather	Abrasion resistance	Limited cut protection
	Breathable	
	Absorbs shock	
	Excellent tear resistance	
	Good puncture protection	
2. Cotton	Comfortable	Minimum protection
	Breathable	
3. Supported		
a) Dipped	Contoured fit	Hands perspire with fully coated styles
	Chemical and solvent protection (fully dipped)	Heavier styles have limited dexterity
b) Cut-n-sewn	Excellent wear ratio to cottons	Limited liquid protection
	Better fit than the heavier dipped styles	
4. Unsupported	Greater dexterity plus chemical protection	Minimum cut or abrasion protection
5. String knits		
a) Basic styles	Low cost, general purpose	No liquid protection
b) Kevlar®, Twaron®	Medium cut resistance	Decomposes w/bleach
c) High performance (stainless steel, Spectra, Dyneema)	Cut resistance	Very limited thermal properties

House Panel Blocks TB Respirator Fit-Testing for Another Year

OSHA will be prohibited for another year from making hospitals do annual fit-testing of respirators designed to prevent occupational exposure to tuberculosis if language passed by a House appropriations subcommittee June 9 becomes law. Critics of the move hope to strip the provision before the fiscal year 2006 Labor spending bill becomes law, arguing national security would be threatened if healthcare workers are not protected from TB during emergency situations.

Source: DENIX "Inside OSHA"

<https://www.denix.osd.mil/denix/DOD/News/Pubs/OSHA/13Jun05/01.doc.html>

Note: DENIX account required (<https://www.denix.osd.mil>)

Date: 13 June 2005

A New Method to Clean Dust from Soiled Work Clothes

DHHS (NIOSH) Publication No. 2005-136

NIOSH researchers have developed a new method to clean dust-soiled clothing on workers at mineral processing operations. The process uses a compressed air nozzle manifold to blow dust from the workers' clothes in an enclosed booth. Because the air exhausted by the dust collector causes the booth to be under negative pressure, no dust escapes to contaminate the work environment or other workers. Test results have shown that this process is ten times faster and removes up to 50% more dust than the single air hose or vacuuming methods.

<http://www.cdc.gov/niosh/enews/enewsV3N2.html#a>

KEY INDUSTRIAL HYGIENE TOPICS (con't)

North American Congress of Clinical Toxicology (NAACT) 2005

The American Academy of Clinical Toxicology and the American Association of Poison Control Centers will host the North American Congress of Clinical Toxicology 2005, September 9-14, 2005 in Orlando, Florida. The agenda features three NIOSH-related sessions: Developing an Occupational and Environmental Toxicology Research Agenda, Occupational/NIOSH Case Files, and an EPA/NIOSH/OSHA workshop on risk assessment and n-propyl bromide. More information on the conference can be found at <http://www.clintox.org>

Advanced Personal Protective Equipment - Challenges in Protecting First Responders

The NIOSH National Personal Protective Technology Laboratory (NPPTL) and the Virginia Polytechnic Institute and State University are sponsoring Advanced Personal Protective Equipment - Challenges in Protecting First Responders. The conference will be held October 16-18, 2005 at the Virginia Tech and Skelton Conference Center in Blacksburg, Va.

Attendees will learn about the hazards posed by emerging threats, the application of personal protective equipment (PPE) technology to these threats, and associated challenges with selecting and interfacing different PPE items. The emphasis of the conference will be on practical issues of threat accommodation, standards, regulations, applications of best practices, manufacturing and distribution issues, PPE decision-making and purchasing, and multi-PPE integration. More information on the conference can be found at <http://www.conted.vt.edu/appe> or by contacting Tom Fisher at: TFisher@cdc.gov

Division of Respiratory Disease Studies (DRDS)

As part of ongoing efforts to optimize the utility and effectiveness of pulmonary function testing performed in the occupational health setting, DRDS held a workshop at the American Occupational Health Conference on May 2, 2005. The OSHA Cotton Dust Standard gives NIOSH responsibility for approving courses of instruction of all individuals who administer screening pulmonary function testing to employees covered by that OSHA Standard. Several medical professional societies recommend that all technicians who collect spirometry data in the occupational setting take a NIOSH-Approved Spirometry Training Course. Institute staff discussed potential curriculum changes to the NIOSH-Approved Spirometry Training Course and solicited input and engaged workshop participants. More information on the spirometry training courses can be found at <http://www.cdc.gov/niosh/topics/spirometry>

To receive a summary of the workshop discussion or to provide comments, send an e-mail to: spirometry@cdc.gov

Hazardous Materials

Physical Hazards of Chemicals—Overlooked?

When assessing potential workplace employee exposure to chemicals, safety and health personnel will generally first evaluate the product label or the material safety data sheet (MSDS). The MSDS evaluation initially focuses on the chemical components of the material used in the process, the health hazard information, the permissible exposure limit for the Occupational Safety and Health Administration (OSHA), and other listed occupational exposure limits. Safety and health personnel will then generally review what the manufacturer of the chemical recommends for personal protective equipment, ventilation recommendations, and then conditions to avoid. The physical hazard information such as flash point, flammability, and combustibility may not be immediately focused on, or in some cases it is not focused on at all.

KEY INDUSTRIAL HYGIENE TOPICS (con't)

This inspection by OSHA was initiated by a referral from the state fire marshal. According to the fire marshal, a 19-year-old summer student working the second shift was adding a combustible liquid to a 545-kilogram mixing tank when a flash fire occurred. The worker received second and third degree burns over 20% of his body including his hands, arms, and chest. In this case, employees had been trained on the health hazard information of the chemicals from the MSDS, as well as personal protective equipment recommendations, and chemical compatibility issues. However, the OSHA investigation found that the flash point, flammability, and combustibility of the chemicals in use were not adequately dealt with in worker training.

Source: Journal of Occupational and Environmental Hygiene | Vol: 2 | Issue: 7 | Year: 2005 | Month: July | PP: D54 - D56

General Chemical Safety: Safety Comes First with Storage of Chemicals

At a recent American Society of Safety Engineers meeting, Matt Bruns of Pfizer Research Corp. gave a presentation on establishing a consistent program for safe chemical storage. Under his chemical categorization, segregation, and storage protocol, chemicals are grouped into seven storage categories-from most hazardous to less hazardous. According to Bruns, workers and supervisors in work areas with many chemicals may be tempted to store their chemicals alphabetically, according to common chemical name, to make it easy to find them, but this is a dangerous practice. It is safer to take the time to create a seven-category group storage system. Then you can store them alphabetically within the specific group. Proper storage is among the many topics covered in Chemicals in the Workplace, a PowerPoint(r) training tool that focuses on chemicals most commonly used in the workplace, including sulfuric acid, mercury, formaldehyde, and gasoline. With a license to the product, you can choose 15 chemicals that are most important to you. Training meetings cover applicable regulations, exposure limits, basic safety rules, and more.

Business and Legal Reports, May 2005

<http://www2.blr.com>

United Steelworkers Plans to Challenge MSHA Diesel Exhaust

The United Steelworkers (USW) union plans to file a suit challenging the Mine Safety and Health Administration's (MSHA) decision to expand mine operators' ability to rely on respirators in lieu of engineering controls under the agency's new permissible exposure limit (PEL) for diesel exhaust.

Source: DENIX "Inside OSHA"

<https://www.denix.osd.mil/denix/DOD/News/Pubs/OSHA/13Jun05/03.doc.html>

Ethylene Oxide Rule to Stand

OSHA recently announced that its standard regulating ethylene oxide is effective and will remain in place. The agency reviewed the regulation as part of the Regulatory Flexibility Act, which requires agencies to periodically review standards to determine whether they should be continued without change, rescinded or amended. Ethylene oxide is primarily used as a chemical intermediate to produce antifreeze and as a sterilant in hospitals and for medical devices. The agency maintains a Safety and Health Topics website on the chemical; it can be accessed at

http://www.osha.gov/dts/chemicalsampling/data/CH_240450.html

KEY INDUSTRIAL HYGIENE TOPICS (con't)

HexChrome Rule Is Expected Later This Year, OSHA Reports

In an interview with Bureau of National Affairs (BNA), an OSHA official indicated that the agency expects to finish writing the final hexavalent chromium rule by September, at which time it would be submitted to the Office of Management and Budget (OMB). OSHA announced the proposed rule in October 2004 and has begun its review of comments received in response to that announcement. According to BNA, the agency hopes to have the regulation back from OMB by December so it can make revisions and schedule publication for January 2006—OSHA's court-mandated deadline.

Source: Professional Safety, June 2005

<http://search.epnet.com/login.aspx?direct=true&db=aph&an=17197473>

OSHA Issues Guide on Perchloroethylene Exposure in Dry Cleaning

"Reducing Worker Exposures to Perchloroethylene in Dry Cleaning," a new guidance document from OSHA, provides information on health hazards and current regulations; offers recommendations for reducing worker exposure; and provides information on training, PPE and new technologies available in the dry-cleaning industry. The publication also addresses how good work practices can minimize worker exposure to perchloroethylene vapors. Perchloroethylene is a volatile organic chemical. Workers who routinely breathe the solvent's vapors or spill it on their skin can develop health problems, including skin, liver and kidney damage, and possibly cancer. Inhalation of the chemical has been shown to cause health effects such as dizziness, loss of coordination, memory loss and blistering of skin. To access the guide, visit www.osha.gov

Source: Professional Safety, June 2005

<http://search.epnet.com/login.aspx?direct=true&db=aph&an=17197483>

Health Effects of Welding

NIOSH and the West Virginia University (WVU) Institute of Occupational and Environmental Health (IOEH) are teaming up to sponsor an international seminar, "Health Effects of Welding," on July 23-24, 2005 in Morgantown, W.Va. Leading experts from around the world will gather to share the latest information in key research areas regarding potential respiratory, neurological, and reproductive effects associated with welding fumes or inhaled welding particles. More information about the symposium can be found at

<http://www.hsc.wvu.edu/IOEH>

Welding and Manganese Fumes

A Mayo Clinic case series analysis has pinpointed for the first time syndromes associated with toxic damage to the brain and nervous system from manganese fumes generated during welding. The analysis also revealed that all affected patients shared a risk factor: welding with inadequate ventilation. The findings are published online at <http://www.neurology.org> and will appear in the June 28 print issue of Neurology.

In the Mayo analysis, the researchers examined medical records from eight patients referred to the clinic between 1999 and 2005 for various nervous system complaints. All of their MRI scans showed an area of increased T1 signal intensity in the basal ganglia region of the brain, which appears as a bright spot on the MRI scan and is a biological indicator of manganese accumulation. All were men involved in welding for one to 25 years before symptoms developed. Initial symptoms varied, but multiple symptoms developed over time, including cognitive impairment, headaches and tremor in six of the patients, and balance problems in five patients. Each patient was diagnosed with neurotoxicity from welding fumes after undergoing testing appropriate to the patient's complaints, such as blood and urine testing, brain MRI and psychological testing of intelligence, aptitude and personality traits.

KEY INDUSTRIAL HYGIENE TOPICS (con't)

Sampling and Analysis

Understanding Oxygen Sensor Performance

Oxygen deficiency is one of the most common of all categories of atmospheric hazards. It stands to reason that the sensors used to measure oxygen concentration are one of the most widely used types of sensors included in portable atmospheric monitors, especially those used in confined space monitoring procedures. In spite of the millions of oxygen sensor-equipped atmospheric monitors in service in the United States, however, there is still a lot of misunderstanding when it comes to the performance characteristics and limitations of this very important type of sensor.

The standard method used to calibrate most oxygen sensors is to let the instrument automatically adjust its readings to match 20.9 percent while the sensor is located in fresh air. It is very important to “bump test” the oxygen sensor before each day’s use. During the bump test, the proper performance of the sensor and alarms are verified by exposing the sensor to a concentration of oxygen below the oxygen deficiency alarm set-point. Bump testing the O₂ sensor can be done by exposing it to calibration gas packaged in small 34- or 58-liter cylinders or simply by exhaling onto the sensor. Readings should decrease to a level low enough to activate the low-oxygen alarm, then recover. Readings that fail to decrease or that require an abnormally long time to recover fully may indicate a problem with the sensor.

Oxygen sensors are among the most dependable, stable, and reliable type of gas-detecting sensors available. But no sensor can detect gas unless it is used. Understanding your instrument is important; using your instrument is critical.

Source: This article appeared in the May 2005 issue of Occupational Health & Safety.

New Wide-Range Chlorine Meter

The Chlorometer Duo, from water analysis specialist Palintest, is a handheld chlorine meter with an exceptionally broad measurement range. This single instrument can measure both the high chlorine levels used for pipe work sterilization and low residual-disinfectant levels in treated drinking water. The Chlorometer Duo is calibrated to monitor residual chlorine using the internationally recognized DPD standard method. This test reveals both free and total chlorine in the 0-5 mg/L range. The higher-range test uses the well-established iodine release technique for total chlorine analysis across the 0-200 mg/L range. Low-range resolution is 0.01 mg/L, and high-range resolution is 1 mg/L.

Source: Journal of Environmental Health

<http://search.epnet.com/login.aspx?direct=true&db=aph&an=17180327>

Date: Jun2005, Vol. 67 Issue 10

Control Banding is Addressed in New NIOSH Topic Page

The purpose, elements, current and potential applications, and other features of control banding are described in a new NIOSH Web topic page introduced on May 26. The page is available at <http://www.cdc.gov/niosh/topics/ctrlbanding>. Control banding is a process in which a single control technology (such as general ventilation or containment) is applied to one range or band of exposures to a chemical (such as exposures in the range of 1-10 milligrams per cubic meter of air) that falls within a given hazard group (such as skin and eye irritants or severely irritating and corrosive materials). The most developed model for control banding has been established by the Health and Safety Executive (HSE) of the United Kingdom. NIOSH is currently evaluating its utility for the United States.

KEY INDUSTRIAL HYGIENE TOPICS (con't)

MSA Publishes Photoionization Detector White Paper

The MSA Instrument Div. has published "Photoionization Detectors (PIDs), Technology for Detection of volatile Organic Compounds," a new white paper that summarizes the theory behind photoionization detection sensors and describes factors that affect PID performance. Key factors to consider in the selection of a PID are also discussed. PIDs are fast-responding and easy to use for parts-per-million detection of many hazardous volatile organic compounds (VOCs); the devices can also effectively detect and monitor many hazardous substances. Several factors may affect PID performance, notably temperature, humidity and condensation effects. Design considerations can make the difference between a useful PID that can effectively and reliably detect VOCs, and a unit that is plagued with limitations and difficulties, MSA says. For information on the white paper, call MSA at (800) 672-4678 and request data sheet #07-2092. For more information about MSA, visit <http://www.msagasdetection.com>

Radiation

OSHA Seeks Comments on Effects of Occupational Exposure to Ionizing Radiation

OSHA is seeking public comments and information to determine what it should do to address its standards for occupational exposure to ionizing radiation. Use of ionizing radiation has grown significantly in recent years, OSHA says. Sources of the radiation can be found in a wide range of occupational settings, including healthcare facilities, research institutions, nuclear reactors and support facilities, nuclear weapon production facilities and various manufacturing settings.

OSHA's current standard addresses the possession, use or transfer of ionizing radiation sources and requires that employers maintain worker exposures below 1.25 rem per quarter. The standard also requires employers to conduct exposure monitoring, provide training for employees above 100, provide medical monitoring, maintain records of employee exposures and notify OSHA of excessive exposures.

The agency is particularly interested in information about current uses of ionizing radiation in the workplace and issues related to its use, such as employee exposure levels, health effects of ionizing radiation exposure and workplace programs to control such exposure. Written comments must be submitted by Aug. 1, 2005. Written comments (10 pages or fewer) can be faxed to OSHA's Docket Office at (202) 693-1648 or sent electronically via <http://ecomments.osha.gov>

Heat Stress

Under Heat: What you Should Know About Heat Stress

Elevated environmental temperatures in a plant can contribute to worker occupational health concerns in the form of heat stress. Operations where high temperatures, radiant heat sources, high humidity, direct physical contact with hot objects or strenuous physical activities are present have a high potential for heat stress. Four environmental factors affect the amount of stress a worker faces in a hot work area: temperature, humidity, radiant heat (such as from a furnace) and air velocity. Personal characteristics such as age, weight, fitness, medical conditions and acclimatization to heat also affect the amount of stress a worker faces.

Heat Alert Program: A written heat alert program should be developed and implemented whenever the National Weather Service or other competent weather forecast service states that a heat wave is likely to occur the following day or days. A heat wave is indicated when daily maximum temperature exceeds 95°F or when the daily maximum temperature exceeds 90°F and is 9T or more above the maximum reached on the preceding days.

KEY INDUSTRIAL HYGIENE TOPICS (con't)

This article goes on to review heat disorders, evaluating heat stress exposures, and heat stress control measures. The article in Professional Safety is based on an original article published by Kevin Stewart, CIH, is a senior industrial hygienist with the St. Paul Travelers, Hartford, CT (Loss Control Topics & Challenges, a Travelers newsletter)

Source: Professional Safety, June 2005

<http://search.epnet.com/login.aspx?direct=true&db=aph&an=17196903>

Guide: Protect workers against heat exhaustion and stroke

When the body is unable to cool itself through sweating, serious heat illnesses may occur. The most severe heat-induced illnesses are heat exhaustion and heat stroke. If actions are not taken to treat heat exhaustion, the illness could progress to heat stroke and death. This guide from the Oregon Occupational Safety and Health Division offers advice on what to do if a worker displays signs of heat exhaustion or stroke, as well as preventative tips.

Heat Exhaustion *What happens to the body:*

Headaches, dizziness or light-headedness, weakness, mood changes, irritability or confusion, feeling sick to your stomach, vomiting, fainting, decreased and dark-colored urine, and pale, clammy skin.

What should be done:

- ◆ Move the person to a cool shaded area. Don't leave the person alone. If the person is dizzy or light-headed, lay him on his back and raise his legs about 6-8 inches. If the person is sick to his stomach, lay him on his side.
- ◆ Loosen and remove heavy clothing.
- ◆ Have the person drink some cool water (a small cup every 15 minutes) if he is not feeling sick to his stomach.
- ◆ Try to cool the person by fanning him. Cool the skin with a cool spray mist of water or wet cloth.
- ◆ If the person does not feel better in a few minutes call for emergency help (ambulance or call 911.)

(If heat exhaustion is not treated, the illness may advance to heat stroke.)

HEAT STROKE - A Medical Emergency *What happens to the body:*

Dry, pale skin (no sweating); hot red skin (looks like a sunburn); mood changes; irritability, confusion, and not making any sense; seizures or fits, and collapse (will not respond).

What should be done:

- ◆ Call for emergency help (i.e., ambulance or 911.)
- ◆ Move the person to a cool, shaded area. Don't leave the person alone. Lay him on his back and if the person is having seizures, remove objects close to him so he won't hit them. If the person is sick to his stomach, lay him on his side.
- ◆ Remove heavy and outer clothing.
- ◆ Have the person drink some cool water (a small cup every 15 minutes) if he is alert enough to drink anything and not feeling sick to his stomach.
- ◆ Try to cool the person by fanning him or her. Cool the skin with a cool spray mist of water, wet cloth or wet sheet.
- ◆ If ice is available, place ice packs in armpits and groin area.

How to Protect Workers

- ◆ Learn the signs and symptoms of heat-induced illnesses and what to do to help the worker.
- ◆ Train workers about heat-induced illnesses.
- ◆ Perform the heaviest work during the coolest part of the day.
- ◆ Slowly build up tolerance to the heat and the work activity (usually takes up to 2 weeks.)

KEY INDUSTRIAL HYGIENE TOPICS (con't)

- ◆ Use the buddy system (work in pairs.)
- ◆ Drink plenty of cool water (one small cup every 15-20 minutes.)
- ◆ Wear light, loose-fitting, breathable (like cotton) clothing.
- ◆ Take frequent short breaks in cool, shaded areas (allow your body to cool down.)
- ◆ Avoid eating large meals before working in hot environments.
- ◆ Avoid caffeine and alcoholic beverages (these beverages make the body lose water and increase the risk of heat illnesses).

Workers are at increased risk when...

- ◆ They take certain medications. Make workers check with their doctor, nurse or pharmacy to see if medicines they take will affect them when working in hot environments.
- ◆ They have had a heat-induced illness in the past.
- ◆ They wear personal protective equipment.

Source: Occupational Health and Safety E-New, 5-31-05

PREVENTIVE MEDICINE

Avian Influenza. NIOSH and OSHA have developed the Avian Influenza Protecting Poultry Workers at Risk Safety and Health Information Bulletin. This bulletin may be accessed at <http://www.osha.gov/dts/shib121304.html>

Certified Pool-Spa Inspector Training

The National Environmental Health Association (NEHA) and the National Swimming Pool Foundation have jointly launched the Certified Pool-Spa Inspector (CPI) Training CD to help public and environmental health officials conduct effective inspections and to help pool and spa operators maintain exceptional facilities. This national training program will increase the consistency and effectiveness of inspections, ultimately protecting the public by reducing the potential for injury and illness. The interactive CD-based program provides several advantages. The training is cost-effective and convenient, since health officials view the program on a computer at their facility, thus eliminating the need to pay for and travel to classes.

Source: Journal of Environmental Health

<http://search.epnet.com/login.aspx?direct=true&db=aph&an=17180298>

Date: Jun2005, Vol. 67 Issue 10

Better Labels for Mosquito Control Products

The U.S. Environmental Protection Agency (EPA) has issued seven new recommendations to pesticide registrants and others for improving label statements for pesticide products used to control adult mosquitoes. The recommendations pertain to pesticide products applied by ultra-low-volume aerial- or ground-application methods. The recommendations promote consistency and clarify labeling statements that may have been unclear to users. The improvements will help public health mosquito control officials apply the most effective techniques while ensuring that use of the products does not pose unreasonable risks to public health or the environment. U.S. EPA worked with state agencies to develop initial recommendations and presented them at two public meetings of the Pesticide Program Dialogue Committee, an advisory committee of U.S. EPA representing a full spectrum of interests, including pesticide manufacturers, public health agencies, academia, user groups, and public-interest groups. In April 2004, U.S. EPA issued draft recommendations for public comment.

Source: Journal of Environmental Health

<http://search.epnet.com/login.aspx?direct=true&db=aph&an=17173454>

PREVENTIVE MEDICINE (con't)

Date: Jun2005, Vol. 67 Issue 10

OSHA Plans Defibrillator Study: AHA, AAOHN to Promote AED Use

As OSHA prepares to conduct a study on the use of automatic external defibrillators (AEDs), two medical associations hope to enlist the agency's help in promoting the use of AEDs in workplaces for restoring a normal heart rhythm in case of life-threatening cardiac arrest. The underlying debate is over what OSHA's role should be in achieving expanded use of AEDs in workplaces.

Source: Denix "Inside OSHA"

<https://www.denix.osd.mil/denix/DOD/News/Pubs/OSHA/13Jun05/06.doc.html>

Date: 13 June 2005

Work, Stress and Health 2006: Making a Difference in the Workplace

NIOSH, the American Psychological Association, the National Institute of Justice of the U.S. Department of Justice, the National Institute on Disability and Rehabilitation Research of the U.S. Department of Education, and the U.S. Department of Labor, will convene the sixth international conference on occupational stress and health, Work, Stress, and Health 2006: Making a Difference in the Workplace in Miami, Florida, March 2-4, 2006, at the Hyatt Regency Miami Hotel. The conference is designed to address the constantly changing nature of work, and the implications of these changes for the health, safety, and well-being of workers. In keeping with the conference theme of "making a difference in the workplace," there will be a particular focus on the translation of research to practice and workplace programs, policies, practices, case experiences, and other efforts to prevent stress in today's workplace. More information about the conference can be found at: <http://www.apa.org/pi/work/wsh2006.html>

Pregnant Employees: Special considerations for protecting their safety and health

This article reviews legal, historic and social realities of pregnancy in the workplace. Its focus is the safety, health and comfort of pregnant women. Topics Include the evolution of workplace customs with respect to pregnancy and the current state of practices in the U.S. and Internationally, as well as safe procedures and recommended guidelines in the areas of fatigue, workstation design, upper-body strength, shift work, stress, work pace, secondhand smoke, posture and work environment.

You can read the entire article by Julia Kalish and Niaz Latif in Professional Safety.

Source: Professional Safety, June 2005

<http://search.epnet.com/login.aspx?direct=true&db=aph&an=17196401>

National Occupational Research Agenda. A significant evolution of NORA is the move to sector-based research agendas. This approach represents a new way for NORA to involve partners in recognizing problems and solving them through research. Scientists, whose research focuses primarily on a particular occupation, such as the investigation of fire fighter fatalities and the development of control technologies for mine safety, can easily identify with this approach. The picture may not be as clear for those scientists whose laboratory-based research is organized around the principles of a scientific discipline, such as chemistry, biology and physics. In response to your comments and concerns about where more basic research fits into the sector-based approach, we share two examples of laboratory-based research that it expected to make significant contributions to identifying or solving important problems within a sector.

PREVENTIVE MEDICINE (con't)

- ◆ Low level, long-term exposures to toxic materials typically do not result in acute poisoning, but significant chronic effects are suspected although we have few tools for discovering them. Laboratory-based studies have shown that activation of the glial fibrillary acid protein (GFAP) is a sensitive and early response of the nervous system to all types of neurotoxic injuries. Recently, researchers found that GFAP levels were increased in the brains of individuals diagnosed with Alzheimer's disease, vascular dementia and mixed dementia in comparison to non-demented individuals. Bringing this information to bear on occupational safety and health, researchers are currently examining the link between GFAP levels and occupational chemical exposures, such as those experienced by farm workers through pesticide application and exposure to fuel additives among service station workers.
- ◆ Following the respiratory illnesses of several manufacturing workers at microwave popcorn facilities, NIOSH Health Hazard Evaluations determined exposure to the popcorn's artificial butter flavoring was associated with breathing problems in these workers. Samples of the flavorings were brought to the NIOSH laboratories where researchers meticulously examined the components to identify the chemical or chemicals producing this debilitating illness. Laboratory testing revealed changes in pulmonary function. These studies have enabled the popcorn industry to target specific manufacturing areas as sites where changes had a potential to improve worker health.

These are just two examples of the synergistic effect produced by laboratory-based and field- and epidemiology-based studies resulting in valuable information for improving worker safety and health. Continued collaboration among these fields and the translation of ideas across these boundaries will facilitate our shared goal: safer, healthier people at work.

<http://www.cdc.gov/niosh/nora>

SAFETY ISSUES

After the Fall: Will Your Rescue Program Leave Workers Hanging?

When workers are suspended in mid-air after a fall, their lives hang in the balance – even if they survived the fall without a scratch. Employers need to make sure they have a plan that for prompt rescue to employees who are suspended by fall arrest equipment. If an employee is not rescued within 30 minutes venous pooling and orthostatic intolerance could develop and result in serious or fatal injury, as the brain, kidneys and other organs are deprived of oxygen.

Source: Occupational Hazards

<http://www.occupationalhazards.com/> (free email subscription)

Date: June 2005

The Importance of Site Supervisors to Safety

Like the conductor of an orchestra, supervisors set the tone for health, safety and environmental performance, so you must ensure that their actions will strongly influence your company's outcomes. Their active and sincere participation as front-line advocates for health, safety and environmental excellence is essential to prevent incidents of all types. They must understand – and be empowered through proper training and support – how to balance these responsibilities along with the myriad other priorities related to production, quality, cost, customer service and so on.

Source: Occupational Hazards

<http://www.occupationalhazards.com/> (free email subscription)

Date: June 2005

SAFETY ISSUES (con't)

Health & Safety Management Systems: Focus on Management

Summary: Health and safety management systems can drastically reduce injuries, illness and their associated costs. In developing these systems, leadership and management are the most critical elements.

Source: Occupational Hazards

<http://www.occupationalhazards.com/> (free email subscription)

Date: June 2005

CRC Pilot Test

The CRC is conducting a Pilot test from 1 Jun -31 Aug 05 to gauge Soldier interest in Environmental, Safety, and Health courses now available from the Skillsoft Library. Take as many courses as you want. Access at: <http://usarmy.skillport.com>

Home Safety Council Calls American Families to Action during Home Safety Month; Launches Hands on Home Safety Campaign

A new national survey commissioned by the Home Safety Council reveals that nearly 6 out of 10 American parents know that there are actions that should be taken to reduce the risk of a family member suffering a home-related injury. Further evidence of the need for education about home safety is found in the Home Safety Council's State of Home Safety in America™ which shows that nearly 21 million medical visits and 20,000 deaths result from home injuries each year. June is Home Safety Month, and the Home Safety Council is launching the Hands on Home Safety campaign to urge families to take actions to create a safer home environment.

Know the number to Poison Control: 1-800-222-1222

Lower the water heater temperature 120 degrees F

Brighten the lights at top and bottom stairs

Check out the Home Safety Council website for 10 tips to increase the safety of your home.

http://homesafetycouncil.org/home/home_june05_w001.aspx

Performance Measurement

Reviews the book "Measurement of Safety Performance," by Dan Petersen

In his latest book, Dan Petersen answers one of safety's most frequently asked questions: "What safety performance measures should we use?" SH&E professionals and executive management have pondered this question for decades. Most have been looking for a silver bullet." After the search for a single, simple safety performance measure, most organizations continue to use a status-quo results measure such as OSHA recordables.

In his new book *Measurement of Safety Performance*, Petersen uses a straightforward approach and no-nonsense style to explain how proven management concepts can be applied to safety. For example, one key reality readers will clearly understand is the concept that safety performance improvements ultimately involve management system improvements.

Source: Professional Safety, June 2005

<http://search.epnet.com/login.aspx?direct=true&db=aph&an=17197192>

American Conference of Governmental Industrial Hygienist (ACGIH)

Title: “ACGIH® Releases the 2005 Supplement to the Documentation of the TLVs® and BEIs®, 7th Ed.”

Summary: The 2005 Supplement to the Documentation of the Threshold Limit Values and Biological Exposure Indices, 7th Edition is now available. The Supplement contains Documentation for the substances that were on the Notice of Intended Changes for 2005, with their corresponding values and notations that have been approved and adopted as Threshold Limit Values (TLVs®) and Biological Exposure Indices (BEIs®). A revised copyright page, Table of Contents page (with the new TLVs® incorporated), and Appendices are also included. The pages of the Supplement are in a three-hole punched format that can be easily inserted into the Documentation binder.

Source: Today (ACGIH®) Fee-based Membership is required to enter website

<http://acgih.org/members/only/today/vol13no2.htm>

Date: Spring 2005 Issue

American Conference of Governmental Industrial Hygienist (ACGIH)

ACGIH® and AIHA have signed a memorandum of understanding (MOU) to jointly pursue initiatives that are dedicated to protecting workers and improving occupational and environmental health and safety (OEHS). “AIHA and ACGIH® realize that a partnership such as this will strengthen the OEHS profession by utilizing resources from each organization and providing collaborated projects that will compliment both organizations and the profession,” said Donna Doganiero, AIHA President. “This MOU will strengthen the organizations’ working relationship and allow each to serve the profession while maintaining separate identities.”

Source: Today (ACGIH®) Fee-based Membership is required to enter website

<http://acgih.org/members/only/today/vol13no2.htm>

Date: Spring 2005 Issue

NIST Launches New Standards Web Portal

Finding information on technical standards can sometimes be difficult, particularly if one has to wade through “government-ese” to get at needed information. Even hours of searching can result in little progress. To help ease the pain of finding standards-related information, National Institute of Standards and Technology (NIST) has launched a new website, <http://standards.gov>. This site provides businesses, organizations and the public with a portal to sources of information on the thousands of specifications that government agencies reference in regulations or use to guide purchasing decisions.

With tools such as tutorials and a searchable standards database, the site allows visitors to quickly home in on their particular interests. The site features links to standards-related websites maintained by 12 federal departments and independent agencies—a number that will likely grow as other governmental units follow suit and post standards information pertinent to their missions and operations, according to NIST’s Kevin McIntyre, who led development of the site. The site continues to be a work in progress, McIntyre says, and the development team welcomes comments and suggestions for improvements or added features.

Source: Professional Safety, June 2005

<http://search.epnet.com/login.aspx?direct=true&db=aph&an=17195187>

INDUSTRIAL HYGIENE PROFESSIONAL NEWS (con't)

ANSI-National Collaboration to Advance Electronic Health Records

Health and Human Services Secretary Mike Leavitt today announced the formation of a national private-public collaboration to achieve electronic health records and interoperability through agreed upon standards. The American Health Information Community (AHIC) will aid in the nationwide transition to electronic health records (EHRs), which are digital collections of a patient's medical history and health characteristics. The AHIC, which will be formed under the auspices of the Federal Advisory Committee Act, will provide input and recommendations to HHS on how to make health records digital and interoperable, and assure that the privacy and security of those records are protected.

http://www.ansi.org/news_publications/news_story.aspx?menuid=7&articleid=963

ARMY NEWS

Visit this link, click on your state and learn if your Army installation will grow or decrease based on the 2005 Base Realignment and Closure (BRAC) recommendations.

<http://www.hqda.army.mil/acsim/brac/braco.html>

FEDERAL LEGISLATIVE ACTIVITY

Republican Legislation:

Rep. Charlie Norwood has reintroduced his series of four bills to reform OSHA.

HR 739 – Providing flexibility with regard to filing a notice of contest by an employer

HR 740 – Increase membership on the Occupational Safety and Health Review Commission

HR 741 – Judicial deference to Conclusions of Law

HR 741 – Award of attorney's fees and costs

All four of these measures have been marked up by the full House Committee and simply await final action in the House. All four are expected to pass, as they did in the last session of Congress, and make their way to the Senate where they face an uncertain future.

Senator Michael Enzi (R-WY) (new Chairman of the Senate Health, Education, Labor and Pensions Committee) has not indicated whether or not he will support these measures in his Senate Committee. He did not take up the bills in the last session of Congress, but because there is a new subcommittee chairman this time around, the bills are expected to receive due consideration. As proof of this, Senator Johnny Isakson (R-GA), the new subcommittee chairman, held a hearing on May 10 to discuss these measures and other OSHA issues.

AIHA submitted comments to Rep. Norwood on these four measures. AIHA supports two of the bills (HR 739 and HR 740) and withheld support or opposition to the other two bills citing the fact these were more in line with legal issues than occupational health and safety and lacked the "good science" AIHA looks for in legislative measures.

Senator Michael Enzi has stated he intends to reintroduce his Safety Advancement for Employees (SAFE) Act later this year. This bill was a very broad measure providing for several changes to the OSH Act. Most notably of interest to AIHA is the section creating a third party workplace review program. AIHA has long supported this concept and has in the past worked with Senator Enzi on its development.

However, the SAFE Act contains many more provisions that have proven to be controversial. Noteworthy among these is a section that would increase criminal penalties for employers who violate the OSH Act in such a way that it results in a fatality. While many stakeholders agree that criminal penalties need to be raised, as they say "the devil is in the details". Also included is a section on alcohol and drug abuse testing as well as a section addressing the development of model MSDSs.

FEDERAL LEGISLATIVE ACTIVITY (con't)

Speaking of the third party workplace review program, AIHA has been working with several others to develop a stand-alone bill that would create a third party workplace review pilot program. The program would be limited to small businesses and would be put in place in three states. AIHA feels a pilot program is the way to go at this point in time, providing some guidance on whether or not a full-blown program would be acceptable and successful.

Representative Todd Tiahrt has reintroduced a series of bills that address various enforcement issues within OSHA. The bills are HR 977, HR 978, HR 979, HR 980, HR 981, and HR 1028. The bills address issues such as limiting penalties for less than willful violations, limitations on the citing of employers on multi-employer worksites, requiring written statements to employers following an OSHA inspection, a requirements that citations be issued within 30 days of an inspection, allowing for 30 days to contest OSHA citations, and limiting the use of previous citations in subsequent citations.

No hearings have been scheduled on any of these measures.

Democratic Legislation

The other side of the aisle has also introduced legislation to amend the OSH Act. Senator Edward Kennedy (D-MA) and Representative Major Owens (R-NY) have introduced legislation, S 944 and HR 2004 that would make several changes. Some of the provisions – increasing criminal penalties for willful violations, requiring employers to pay for personal protective equipment, whistleblower protections, and the public's right to know about dangerous chemicals in their neighborhood.

Senator Jon Corzine (D-NJ) and Representative Owens have also introduced the criminal penalty provision as stand-alone bills, S 947 and HR 2005.

Representative John Conyers has reintroduced his legislation known as the “Melina” bill, HR 1269. This bill would provide several ways to address the continuing interest in exposure to the hazards of mold. In addition to requiring EPA and others to address the issue of competency for individuals involved with mold inspection and abatement, the bill would provide a broad list of services to mold victims. A federal insurance program would be created that would reimburse victims. The bill would also require additional research into the issue and create education programs for the public.

The bill received little support in the last session of Congress and it is doubtful it will receive much support this time around. AIHA is one of the only organizations that submitted extensive comments to Rep. Conyers.

The issue remains of interest at OSHA though. The agency hopes to soon issue health and safety guidelines on exposure to mold. Many hoped the agency would have moved a little faster on this guideline since they announced their intention more than a year ago.

GREAT LINKS TO OTHER SITES

INDUSTTRIAL HYGIENE LINKS

<http://www.osha.gov>

The Occupational Safety and Health Administration (OSHA) is a Federal agency under the Department of Labor which sets and enforces occupational health and safety regulations, such as the Permissible Exposure Limits (PELs). OSHA's mission is also to provide training, outreach and education; establish partnerships' and encourage continual improvement in workplace safety and health.

INDUSTRIAL HYGIENE LINKS (con't)

<http://www.cdc.gov/niosh/homepage.html>

The National Institute for Occupational Safety and Health (NIOSH) is the federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness. NIOSH is part of the Centers for Disease Control and Prevention (CDC) in the Department of Health and Human Services.

<http://www.aiha.org/>

The American Industrial Hygiene Association (AIHA) is a nonprofit organization with more than 75 local sections. AIHA's 12,000 members are highly educated professionals; 96 percent are college graduates, 61 percent hold master's degrees, and 6 percent possess doctoral degrees. AIHA is one of the largest international associations serving the needs of occupational and environmental health professionals practicing industrial hygiene in industry, government, labor, academic institutions, and independent organizations.

<http://www.acgih.org/home.htm>

The American Conference of Governmental Industrial Hygienists (ACGIH®), has been considered a well-respected organization by individuals in the industrial hygiene and occupational health and safety industry for over 65 years. Undoubtedly the best known of ACGIH®'s activities, the Threshold Limit Values for Chemical Substances (TLV®) Book, list 642 chemical substances and physical agents, as well as 38 Biological Exposure Indices for selected chemicals.

<http://www.abih.org/>

The American Board of Industrial Hygiene (ABIH®), a not-for-profit corporation, was organized to improve the practice and educational standards of the profession of industrial hygiene. The activities presently engaged in for carrying out this purpose are:

1. offering certification examinations to industrial hygienists with the required educational background and professional industrial hygiene experience;
2. acknowledging individuals who successfully complete the examination by issuing a certificate;
3. requiring Diplomats to maintain their certification by submitting evidence of continued professional development; and
4. maintaining records and publishing a roster of certificate holders for the profession and the public.

<http://www.iaqa.org/>

The Indoor Air Quality Association (IAQA) was established in 1995 to promote uniform standards, procedures and protocols in the Indoor Air Quality industry. Since its inception, IAQA has become a leader in training and education for IAQ practitioners. The association is committed to education and research, and serves as a forum for the exchange of ideas within the emerging IAQ field.

ARMY-RELATED INFORMATION

<https://www.us.army.mil/suite/login/welcome.html>

The Army Portal, ***Army Knowledge Online (AKO)***, is a primary component of The Army Knowledge Management (AKM) strategy and The Army Transformation. As the single point of entry into a robust and scalable knowledge management system, AKO is strategically changing the way The Army does business. By enabling greater knowledge sharing among Army communities, AKM fosters improved decision dominance by commanders and business stewards in the battle space, organizations, and Army's mission processes.

<https://crc.army.mil/home/>

The United States Army Combat Readiness Center (CRC) is the center of gravity where all loss-related areas overlap. It is leading edge, proactive, and focused on the Soldier through investigation and predictive analysis. The raises the level of awareness for the Soldier to help him/her better manage risk and improve combat readiness.

<https://www.denix.osd.mil/denix/denix.html>

The Defense Environmental Network & Information Exchange (DENIX) is the central platform and information clearinghouse for environment, safety and occupational health (ESOH) news, information, policy, and guidance. Serving the worldwide greater Department of Defense (DoD) community, DENIX offers ESOH professionals a vast document library, a gateway to web-based environmental compliance tools, an interactive workgroup environment, a variety of groupware tools and an active membership community numbering thousands. DENIX provides ESOH professionals an up-to-date, multi-functional resource to assist in preserving and protecting the natural environment, achieving greater energy efficiency, providing a safer and healthier work environment and meeting readiness and compliance needs of Congressional and DoD ESOH requirements.